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ABSTRACT

Congress, using Public Law 94-482 entitled Education Amendments of 1976, instructed the National Center for Education Statistics (NCES) to develop, implement, and operate the Vocational Education Data System (VEDS). As mandated by legislation, the primary purpose of VEDS is to provide a national reporting system to generate uniform data from the States to support the decision-making activities of Congress with respect to the establishment of vocational education policies. This study was designed to enhance the understanding of VEDS and to assess the VEDS methodology and data quality for each state. The assessment resulted in the development of a VEDS implementation and operation status report for each State which documented the degree of correspondence between VEDS and State definitions, and between VEDS and State data elements; the identification of a State's ability to provide data related to each VEDS data requirement; and the quality and accessibility of VEDS data. (PN)

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# A Content Analysis of the VEDS Data Collection and Reporting Procedures Used by the 57 State Boards for Vocational Education*

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## INTRODUCTION

The 1975 vocational education congressional hearings were marked by concern over the lack of reliable data regarding the vocational education enterprise. Congress noted that existing Federal data on the nation's vocational education system was inadequate to be used as the basis on which either to formulate, or assess the impact of, Federal policies for the support of vocational education. This prompted Congress to begin considering a national vocational education data accounting and reporting system which would provide answers to four critical questions about vocational education activities. These questions were as follows:

- Who is being served in vocational education programs?
- What are they being served?
- What is accomplished?
- What is the cost?

Congress, using Public Law 94-482 entitled the Education Amendments of 1976, instructed the National Center for Education Statistics (NCES) to develop, implement, and operate the Vocational Education Data System (VEDS). As mandated by legislation, the primary purpose of VEDS is to provide a national reporting system to generate uniform data from the States to support the decision-making actvities of Congress with respect to the establishment of vocational education policies. Upon enactment of P.L. 94-482, NCES analyed the congressional intent of this legislative mandate and initiated several related activities which would lead to the solution of the problem of designing and implementing the VEDS system.

A central planning committee was established in October 1976 whose efforts included the determination of resource needs, identification of potential user groups and identification of potential data collection and reporting overlaps with existing survey efforts. The planning committee's efforts were complimented by meetings with State agency representatives to discuss data collection timing and interfaces with other data systems. In March 1977 a VEDS planning task force was formed for the purpose of developing uniform definitions for required data elements and to resolve issues between Federal and State agencies on reporting and record keeping requirements. Also initiated in March 1977 were a series of meetings with the Committee on Evaluation and Information Systems (CEIS) designed to address issues related to both data burden and the ability of States to provide accurate and reliable data. In addition, the CEIS group provided input on (1) related data collection efforts, (2) existing State data collection practices, and (3) conceptual input on systems design.

Thus, these series of meetings served to identify and prioritize information needs relevant to the vocational education enterprise which in turn led to the determination of a basic core of data questions and associated information elements which could meet the information needs. Initially, VEDS was comprised of the following three components:

(1) Educational Process Component -encompasses data collection and reporting on students' enrollments and teachers' involvement in vocational education;

(2) Educational Finance Component -collects and reports data relative to expenditures and facilities utilized for vocational education; and

(3) Educational Impact Component -includes the collection and reporting of data obtained from students and students' employers, where appropriate, following their departure from vocational education programs.

During August and September (1977), NCES let several contracts to selected States as part of a feasibility study designed to test the capacity of States to obtain reliable, accurate data from local education agencies and postsecondary institutions using the designed data elements and definitions. States, involved in the feasibility study, were selected based on their reported capability or inability to provide data related to one of the three components of VEDS. Following the implementation of the feasibility study, NCES staff soon realized that operational definitions and decisions were necessary in order to implement data collection at the local level and to ensure that compatible results would be achieved across States. Therefore, the results of the feasibility study led NCES staff to refine and restructure VEDS.

In October 1978 a series of four regional workshops were initiated. These workshops were desinged to provide technical assistance to States assuring that personnel from each State fully understood the reporting requirements of the data system. Data collected by VEDS was initiated for the 1978-79 school year, however, data was reported only for portions of the data system. In both the 1979-80 and 1980-81 school years, all data contained in the system were collected.

Throughout these data collection efforts NCES has continually responded and resolved system problems and continued the refinement of data collection forms

and reporting procedures. Currently the VEDS system contains five reporting components or purposes. These include: enrollment/completion reporting; completer/leaver follow-up reporting; employer follow-up reporting; teacher/staff reporting; and financial reporting. In addition, data are collected and reported by level (i.e., secondary and postsecondary) for each of these reporting purposes.

NCES has also undertaken studies which address issues or concerns related to the burden placed on States in meeting the VEDS mandate as well as the quality of data provided by States. During 1980 NCES carried out a study which developed a cost/economic model for the estimation of costs to the States engendered by the VEDS reporting requirements. The model was pilot-tested by nine States who supplied estimates from their files, in accordance with the dictates of the model, of the human and dollar costs of complying with the VEDS mandate. Based on the pilot test results the model is to be refined.

Also during 1980, NCES conducted an assessment of the implementation of VEDS for the 1979-80 and 1980-81 reporting years. This study was desinged to assess the VEDS methodology and data quality for each State. Some of the results of this study are reported in this paper.

## PURPOSE OF THE STUDY

NCES has worked extensively with Federal, State, local, and various private groups and agencies regarding the development of a national vocational education data system. This has enabled NCES to recognize the inconsistent

relationships which exist among these groups and agencies with respect to: the type and amount of data collected, the definitions and forms used in data collection, and the many other variables effecting a meaningful comparison and aggregation of data related to the vocational education enterprise. In response to and in recognition of the responsibility to assure the quality of data provided by the States and Territories (hereinafter States), NCES developed and implemented a statement of work for the conduct of an assessment of the implementations of VEDS. This assessment, designed to enhance the uderstanding of VEDS, had the sole purpose of assessing the VEDS methodology and data quality for each State. The assessment resulted in the development of a VEDS implementation and operation status report for each State which documented:

- The degree of correspondence between VEDS definitions and State definitions;
- The degree of correspondence between VEDS data elements and State data elements;
- The identification of a State's ability to provide data related to each VEDS data requirement; and
- The quality and accessability of VEDS data.

## ACQUISITION OF STATE PARTICIPATION

At the onset of the project, a letter was sent to each State Executive Officer of the Sole State Board for Vocational Education encouraging and requesting participation in the study. The letter included a request for all relevant State data collection forms, instruments, definitions and instructions used by secondary and postsecondary institutions (PSI) in the collection of VEDS data

for the 1979-80 and 1980-81 reporting years. For States which did not respond to the initial request, follow-up letters were mailed to the State Executive Office's and State Directors for Vocational Education. Finally, follow-up telephone calls, encouraging participation in the study, were made when appropriate.

## RESPONSE RATE

State participation in the study was strictly voluntary. Following the request to all fifty-seven (57) States and Territories for materials relevant to the collection and reporting of vocational education data to NCES, materials were received from fifty (87.7%) of the States. The 50 participating States represent 86.8% of the total vocational education enrollment in the United States and Territories. The vocational education enrollment in the non-participating States is approximately 2.25 million. It should be noted that the findings and conclusions presented, herein, are exclusive of the VEDS instruments and procedures utilized in the seven non-responding States since evaluative judgements relevant to the VEDS data collection and reporting procedures used in these States could not be made.

## ANALYSIS PROCEDURES

Materials received from States were logged and referenced through the use of an "Identification Form" designed by project staff. This form, completed for each State, served to synthesize all the materials provided by the States and in turn, clearly delineated the scope of data collection and reporting

materials relevant to individual States as well as across all States. The entries noted on these forms provided a basis from which further analyses and conclusions were made, therefore, all analyses and conclusions identified are limited to the materials provided to project staff by the States.

Prior to the analysis of materials project staff designed and developed a detailed analysis plan. The overall purpose of the analysis plan, modified and approved by NCES, was to provide project staff with a procedure which identified the State's ability to provide consistent data related to the VEDS data requirements. The analysis plan consisted of three steps.

First, a set of forms designed to address the VEDS data elements associated with each of the five (5) VEDS reporting purposes and reporting levels, was completed for each State. The forms assisted project staff in the identification and synthesis of State specific materials. This made it possible to answer the following series of pertinent questions related to each VEDS data element for each State:

- Which State form(s) was/were used to collect the data?
- To what extent did State definitons pertaining to a specific data requirement agree with VEDS defintions?
- How were the State data elements or questions presented for data collection?
- Were the State data elements linked in the same manner as the VEDS data requirements?
- Was there a State deficiency relative to specific VEDS data requirements?
- Was the State able to complete the specific data requirements?

Second, using the information gained from the answers to the above set of questions, a report was prepared for each State. Each State Specific Report addressed: a) the extent to which data collection was shared by mutiple collection efforts, b) missing links between State data elements, c) data linkages that needed to be manipulated possibly across several State forms or several data elements, and d) areas of data deficiencies that were not acknowledged by the State. Drafts of the State Specific Reports were mailed to the State Executive Officers and State Vocational Education Directors for their review and reactions.

Finally, based on the written reactions to the draft State Specific Reports, each of the individual State specific analyses were updated and finalized. In many cases additional materials were provided by the States which made it necessary to re-analyze the entire set of State materials based on the updated information provided by States. Following re-analysis, a final State Specific Report was prepared and mailed to the respective State offices.

## RESULTS OF THE INDIVIDUAL STATE ASSESSMENTS

The individual State assessments resulted in a number of findings. These findings, identified and discussed in the following sections, are presented by each of the five VEDS reporting purposes (i.e., enrollment/completion, completer/leaver follow-up, employer follow-up, staffing and financial). The findings, discussions and tables, relevant to each reporting purpose, are based solely on the information provided by the States that elected to participate in the study.

A set of eight tables was prepared to highlight the findings relevant to each VEDS reporting pupose. All numerical entries shown in these tables represent actual counts of States.

Table 1 exhibits the numbers of States providing materials for analysis which addressed the five VEDS reporting purposes for the 1979-80 and 1980-81 reporting years.

Table 2 shows the level of aggregation (i.e., individual unit record, class record, school/institution record, district record, and PSI record) utilized by the States in collecting data relevant to each VEDS reporting purpose for the 1979-80 reporting year. Similarly, Table 3 was designed to show the same breakdowns relevant to the 1980-81 reporting year.

Tables 4 through 8 exhibit the major data concerns associated with each of the VEDS reporting purposes and the number of States whose VEDS data collection and reporting procedures exhibit these data concerns.

## FINDINGS

### Enrollment/Completion Reporting

For 1979-80 data collection and reporting (see Table 1), 45 of the 50 participating States provided forms and/or procedures used at the secondary level, and 41 States provided forms for the postsecondary level. These

findings were slightly reduced to 42 (secondary) and 39 (postsecondary) for 1980-81 reporting. Tables 2 and 3 exhibit the distributions of the number of States by data aggregation level used in the collection and/or reporting of VEDS data for the 1979-80 and 1980-81 reporting years. At the secondary level, for the 1979-80 reporting year, 31 of the 50 participating States used individual unit records for the collection of enrollment/completion data. The remaining States were fairly evenly distributed regarding the use of class, school, and district records. At the postsecondary level, 26 of the States used individual unit records, 10 States used a PSI record, and 5 States used a class level report. A very similar distribution was found for 1980-81 reporting (see Table 3).

The widespread use of an individual unit record in data collection and reporting was seen to provide States with greater control and was particularly useful in determining the State's capability to link enrollment/completion data on former students to data gathered in the completer/leaver and employer follow-up efforts. However, in cases where the State provided forms to collect aggregate counts of completers and enrollees it was not possible to determine how various institutions collected and aggregated data for this reporting purpose. This was indicative of the general problem of determining the uniformity of data collection when aggregate counts were reported and no indication was given as to how the data were actually gathered. This was particularly true when the State simply indicated that the NCES VEDS forms were used for data collection.

Table 4 exhibits a breakdown by reporting year and level of the number of States identified as having concerns regarding their ability to gather data for particular VEDS reporting requirements. Major areas of concern were the reporting of enrollments (a) by legislative purpose, (b) by type of instructional settings, and (c) for students in non-follow-up programs. In general, there was an increase in the number of States exhibiting no data concerns across the 1979-80 and 1980-81 reporting years. Also, when each individual area of concern was examined, it was found that as a rule the number of States exhibiting the concern declined.

The distinction between follow-up and non-follow-up students demonstrates some of the complexity introduced by the use of a definition which was interpreted differently by a sizable number of States. Often it was identified that a student could be classified into the non-follow-up group on the basis of grade level (i.e., 9th, 10th) and program (e.g., Industrial Arts, Consumer and Homemaking, Other NEC). However, this procedure does not classify students in other programs which could lead to sever l "follow-up" programs. Rarely was a student identified on an individual enrollment form as a non-follow-up student. More frequently, a separate aggregate report was prepared by schools for non-follow-up enrollments. Many States did not address the issue at all. This raised the question of whether States reported data using a non-standard definition, or if such States did not have non-follow-up students who could be classified solely on the basis of grade level and program code. This general issue of whether data were reported on a particular group of students, or whether there were no students in that group was applicable to other areas of

concern, such as legislative purpose and type of instructional setting.

Another general area of concern was the reporting of enrollments in generalized types of programs (e.g., legislative purpose, type of instructional setting, co-op programs, apprentice programs). These data requirements were unlikely to be provided as attributes of individual students on enrollment forms (especially legislative purpose and type of instructional setting). Generally, States indicated that this information was obtained from program description information, and usually these materials were not provided. Items which were easily identifiable attributes of individual students at the time of enrollment (e.g., race/ethnic classification, sex, USOE code, special needs, grade level) were the most uniform in definition and were provided by almost all of the States participating in the study. The only exception was the provision of "non-resident alien" enrollments.

At the postsecondary level, the issue of institutional streaming (i.e., regionally accredited, State approved, and other postsecondary) often complicated the analysis task. It was common for one form to be shared by several institutional streams (especially secondary and adult-other postsecondary), but often it was difficult to identify to which streams a form applied. Generally, it was not possible to determine if the materials for a particular postsecondary stream were omitted beacuse it was not clear which streams were in effect in the State. This may account for the generally lower incidence of concerns for the postsecondary level.

Completer/Leaver Follow-up Reporting

For the 1979-80 reporting year, 43 and 39 of the participating States (see Table 1) provided completer/leaver data collection and reporting mechanisms for the secondary and postsecondary reporting levels, respectively. In reference to the 1980-81 reporting year (see Table 1), 34 of the participating States provided secondary completer/leaver follow-up data collection instruments and 32 States supplied postsecondary materials.

As shown in Table 2, for both reporting levels in the 1979-80 reporting year, individual unit records were used for data collection in a majority of the States. Specifically, 37 States for secondary reporting and 32 States for postsecondary reporting. Of the forms provided for the 1980-81 reporting year, only 4 States did not use individual records for secondary reporting as well as 4 States for postsecondary reporting. It was generally found that those States using individual unit records and incorporating an effective data linkage procedure were less likely to exhibit data concerns.

In over one-half (23) of the States, there were no concerns found relevant to the secondary reporting level for the 1979-80 reporting year (see Table 5). At the postsecondary level for 1979-80 reporting, close to one-half of the States provided materials which satisfied all of the VEDS data requirements. All of the VEDS data requirements were satisfied by materials provided by 26 States for secondary reporting and 21 States for postsecondary reporting for 1980-81 (see Table 5).

In identifying the areas of concern at the secondary and postsecondary reporting levels, the most frequent concern for 1979-80 and 1980-81 reporting was how the Standard Occupational Classification (SOC) codes were assigned for VEDS reporting followed by the identification of leaver Status. Those States exhibiting this concern did not give any indication as to the classification of students' employment areas by the SOC categories needed for VEDS reporting. Many States for which this concern was not noted confirmed that SOC categories were manually assigned at the State or local level in accordance with the former student's job title and description.

The second major area of concern exhibited by States addressed the leaver status VEDS data requirement. This VEDS requirement was defined differently for the two reporting years. For 1979-80, States were to classify leavers by the percentage of the program completed for VEDS reporting (i.e., completed over 50% of the program or completed 50% or less of the program). For 1980-81 VEDS reporting, this percentage breakdown was not necessary, therefore explaining the reduction in this concern category from 1979-80 to 1980-81. The concerns that were noted for 1980-81 reporting relate only to those States which did not distinguish program leavers from those who completed the program.

The problem of linkage, most apparent at the postsecondary level for the 1979-80 reporting year, was solved by many States through the use of 1) student identification numbers, 2) pre-coded data collection forms, and 3) computer master files kept for each student. The States exhibiting this concern did not identify how the former students' enrollment/completion data

were linked to the completer/leaver follow-up data for VEDS reporting. In addition, at the postsecondary level for the 1980-81 reporting year, the reporting of completer/leaver follow-up data on non-resident aliens was the most frequent area of concern.

Employer Follow-up Reporting

As exhibited in Table 1, 35 States and 32 States provided employer follow-up materials for use at the secondary and postsecondary reporting levels, respectively for the 1979-80 reporting year. For 1980-81 reporting, 33 States and 31 States provided employer follow-up materials for use at the secondary and postsecondary reporting levels, respectively. As shown in Table 2, all but one State provided 1979-80 secondary materials which utilized individual unit records for the collection of employer follow-up data. At the postsecondary reporting level for 1979-80 reporting, all of the States utilized individual unit records, with the exception of one State using a PSI record. For 1980-81 reporting (see Table 3) all of the secondary and postsecondary materials provided utilized individual unit records with the exception of one State, at each reporting level, which collected data using school/institution records.

A summary of the areas of concern for this reporting purpose is exhibited in Table 6. Approximately one-half of the States provided materials which satisfied all of the VEDS data requirements for both reporting years and levels. It should be noted that all of the employer follow-up forms provided included all of the employee rating items necessary for VEDS reporting.

The major areas of concern were (a) undefined procedures for conducting the follow-up (e.g., unclear as to which streams the form applied), (b) how the employer follow-up data were linded to enrollment/completion data for VEDS reporting, (c) the identification of those former students who left the program prior to completion, and (d) the reporting of non-resident aliens by the employer rating item responses (applies to postsecondary only).

The central concern related to employer follow-up was the linkage of data from employee rating items and scales, to employment status data from the completer/leaver report and to demographic and completion data from the enrollment/completion report. Most commonly, a student identification number was used to link the employer follow-up form with the necessary student data. In some cases the employer follow-up survey was pre-coded with the necessary student demographic and completion data without including any student identifiers. In these cases, no further linkage to enrollment/completion data was necessary for VEDS reporting.

The classification of the former students employer ratings by leaver status (i.e., completed over 50% or completed 50% or less of the program) was changed for 1980-81 VEDS reporting to the general category of leavers. This factor would partially explain the reduction of concerns in this area from 1979-80 to 1980-81. Finally, the breakout of non-resident alien (postsecondary only) employer follow-up data was not required for 1979-80 VEDS reporting, but was introduced by NCES for 1980-81 reporting which explains the increase in the number of States exhibiting this concern.

Teacher/Staff Reporting

The analysis of staffing materials provided by the participating State was generally found to be in agreement with VEDS data requirements and procedures. For 1979-80 reporting, 40 States addressed this reporting purpose at the secondary level and 36 States provided materials for postsecondary reporting (see Table 1). For 1980-81 reporting, 35 participating States provided materials which addressed secondary reporting and 32 States provided data collection and reporting materials relevant to postsecondary reporting (see Table 1).

The primary data aggregation level was found to be individual unit records for both secondary and postsecondary reporting for both the 1979-80 and 1980-81 reporting years (see Tables 2 and 3). However, a few States collected data using a class record, school record, or district record. In addition, postsecondary staffing data was collected through the use of PSI records by 9 States for 1979-80 reporting and 6 States for 1980-81 reporting. Generally, the PSI record was used when States provided the actual NCES VEDS forms to postsecondary institutions in the collection and reporting of data for this VEDS purpose.

Table 7 exhibits the major ares of concerns associated with the VEDS staffing reporting purpose by reporting year and level. The primary concern related to both secondary and postsecondary reporting, for both years, was the identification of "Other Staff." This concern was identified most frequently

when States did not provide forms or indicate the data collection procedures used to obtain information related to non-instructional staff (i.e., local administration/supervisory, local program/support, and State administration/supervisory). A primary concern relevant to both reporting years, but applicable only to postsecondary reporting, was the collection of information on staff designated as part-time. In addition, several States exhibited data concerns related to the collection of information regarding the race/ethnic designation and/or sex designation of staff. Finally, several States did not provide clearly defined procedures for the collection and reporting of staffing information relted to various postsecondary streams (i.e., regionally accredited, and/or State approved) or the identification of the appropriate USOE program codes. These latter concerns are summarized in Table 7 under the concern category of "undefined procedures."

Overall, the data collection and reporting procedures related to this VEDS reporting purpose were judged to be one of the strongest elements of the VEDS system. It is beleieved that this overall strength stems form the States' ability to tie into existing data collection procedures, since most educational institutions maintain individual records on their existing staff.

Financial Reporting

Table 1 exhibits the number of States which provided materials pertinent to financial reporting. For fiscal year 1980 reporting, 35 and 34 of the States provided financed materials for use at the secondary and postsecondary levels, respetively. For fiscal year 1981 reporting, 30 and 28 of the States provided financial materials for use at the secondary and postsecondary levels,

respectively. Several factors were noted in acconunting for the large number of participating States which did not provide financial materials. First, a number of States indicated that all vocational education funding, allocation, tracking, and financial recordkeeping was conducted "in-house" at the SEA level and that there was no need to contact LEA's for financial data. In some cases, when LEA financial data were requested, States indicated that VEDS forms were used and consequently no State forms were provided for analysis. Second, the fact that separate financial and vocational education agencies may exist at the State level and that vocational education financial reporting may be merged with other financial reporting, not related to VEDS, may account for some States' failure to provide the requested financial materials.

As exhibited in Table 2, fiscal year 1980 secondary level financial data was aggregated for reporting by school records (used by 6 States) and district records (used by 20 States). All 34 States providing postsecondary financial forms for fiscal year 1980 utilized PSI records. At the secondary level, for fiscal year 1981 (see Table 3), seven States used school records and 23 States used district records as the aggregation level for reporting financial data. All 28 States providing postsecondary forms for fiscal year 1981 reporting utilized PSI records.

Table 8 summarizes the areas of concern identified by the analysis of the State financial materials provided. No concerns were noted for 23 States at the secondary level and 22 States at the postsecondary level, for fiscal year 1980 reporting. For fiscal year 1981 reporting, no concerns were noted for 23 States at the secondary level and 23 States at the postsecondary level.

The primary area of concern was the "Instructions/Procedures Missing" category. This area of concern was evident for 1980 and 1981 fiscal year reporting at both secondary and postsecondary levels. This concern arose when insufficient information was provided for the identification of project or program funding sources.

Thus, without an explanation of the codes used to classify project or program funding sources it was not possible to identify what Section 110, 120, 130, 140, 150, or 102(d) expenditures were to be reported by the materials provided. In addition, concerns arose when no materials at all were provided by the States which addressed one or more reporting categories such as the Section 110, 120, 130, 140, 150, and 102(d) expenditures or the programs/services/activities expenditures detailed therein. Finally, concerns were also noted when status of funds (e.g., Federal vs. Non-Federal, net outlays, etc.) could not be identified, or when financial collection and reporting materials were not provided relevant to the regionally acredited stream.

Indeed, the large number of States for which no concerns by reporting level and year were noted, reflects the fact that the financial analyses conducted could only outline the presence of a financial accounting system for vocational education which collected data on some or all of the programs, services, and activities and status of funds categories required by VEDS. In

these cases, it was not possible to conduct an in-depth analysis of the procedures and identify the strengths and weaknesses of these systems based solely on the materials provided.

## CONCLUSIONS

Materials that were provided by the States varied extensively in detail and scope. Project staff received various numbers of forms from each paricipating State, ranging from a minimum of two to a maximum of forty. Also, it was found that the materials provided by the States addressed data collection and reporting procedures associated with the entire VEDS system for both the 1979-80 and 1980-81 reporting years, but in many cases the materials addressed only portions of the VEDS required data elements related to reporting levels (secondary and postsecondary) and reporting years (1979-80 and 1980-81).

Overall, there was a general decline across reporting years in the materials provided by States relative to each of the VEDS reporting purposes. However, communication received from the States indicated that in many cases the 1980-81 forms had not yet been finalized at the time they were requested. Overall, it was apparent that progress is being made toward satisfying the VEDS data requirements.

Most States utilized individual unit records in the collection and reporting of data for all but the financial VEDS reporting purpose. It was believed that the use of individual unit records provided the States better control and

flexibility in regard to their VEDS collection and reporting procedures. Enrollment/completion data collection and reporting was determined to be the most crucial VEDS reporting purpose. The individual unit records generated for this reporting purpose provided, in many cases, the basis for reporting completer/leaver and employer follow-up data. Therefore, the strenghts and weaknesses noted for enrollment/completion data most often carried over to competer/leaver and employer follow-up data. In addition several States are in the process of incorporating computerized systems, which will store data on individual students which can be retrieved for VEDS reporting. Once these systems are in operation data collection will become more effective and fewer data concerns will be exhibited.

The major data weaknesses noted for enrollment/complition data were: non-follow-up enrollments, enrollments by legislative purpose, type of instructional setting, special needs and non-resident alien enrollments. It is interesting to note that these data concerns were not associated with the individual unit records used to collect enrollment/completion data. Most often, States designed special forms to gather aggregate counts related to these data requirement and therefore, it was often unclear how this information was gathered or linked to the individual unit records.

The two major data concerns associated with the completer/leaver follow-up reporting purpose were the identification of SOC codes and non-resident alien information. The materials provided by the States most often did not detail how SOC codes were identified relative to the former student employment activities. As previously noted, many States exhibited data concerns related

to the identification of non-resident alien enrollments which in turn made it difficult to ascertain how this group of former students is included in follow-up activities for VEDS reporting purposes. Likewise, the non-resident alien data concern carried over to the employer follow-up activities for the aforementioned reasons. An additional data conern relative to employer follow-up was the unclear linkage of individual employer follow-up data to enrollment/completion data and/or completer/leaver follow-up data. This linkage was often important in order to obtain individual demographic data needed for VEDS reporting.

The materials provided by the States and associated with the VEDS staffing reporting purpose proved to be one of the most complete. The individual unit records utilized most often by the States met most of the VEDS data requirements. However, data concerns arose for most States in determining how information was obtained about "other (non-instructional) staff" and staff who were employed on a part-time basis.

Contrary to staffing, the financial reporting materials provided by the States proved to be the most ambiguous. States most often collected financial data using district aggregate records and/or PSI aggregate records. This resulted in data concerns associated with the determintation of expenditures (i.e., sections 110, 120, 130, 140, 150, and 102(d))and status of funds (e.g., Federal vs. Non-Federal outlays, net outlays). These major data concerns arose frequently since it was impossible to ascertain what district and/or State codes meant or how these codes were used to classify project or program funding sources.

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TABLE 1

NUMBER OF PARTICIPATING STATES* PROVIDING MATERIALS
BY REPORTING PURPOSE, REPORTING YEAR, AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| Reporting Purpose | Secondary | Postsecondary | Secondary | Postsecondary |
| Enrollment/Completion | 45 | 41 | 42 | 39 |
| Completer/Leaver Follow-up | 43 | 39 | 34 | 32 |
| Employer Follow-up | 35 | 32 | 33 | 31 |
| Staffing | 40 | 36 | 35 | 32 |
| Financial | 35 | 34 | 30 | 28 |

*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 2

NUMBER OF PARTICIPATING STATES* PROVIDING MATERIALS FOR 1979-80 BY REPORTING PURPOSE, REPORTING LEVEL, AND DATA AGGREGATION LEVEL

| | Secondary | | | | | Postsecondary | | | |
|---|---|---|---|---|---|---|---|---|---|
| Reporting Purpose | Individual Unit Record | Class Record | School Record | District Record | Total Providing Materials | Individual Unit Record | Class Record | PSI Record | Total Providing Materials |
| Enrollment/Completion | 31 | 4 | 5 | 5 | 45 | 26 | 5 | 10 | 41 |
| Completer/Leaver Follow-up | 37 | - | 4 | 2 | 43 | 32 | - | 7 | 39 |
| Employer Follow-up | 34 | - | 1 | - | 35 | 31 | - | 1 | 32 |
| Staffing | 33 | 1 | 4 | 2 | 40 | 26 | 1 | 9 | 36 |
| Financial | - | - | 6 | 29 | 35 | - | - | 34 | 34 |

*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 3

NUMBER OF PARTICIPATING STATES* PROVIDING MATERIALS FOR 1980-81 BY REPORTING PURPOSE, REPORTING LEVEL, AND DATA AGGREGATION LEVEL

| Reporting Purpose | Secondary | | | | | Postsecondary | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Individual Unit Record | Class Record | School Record | District Record | Total Providing Materials | Individual Unit Record | Class Record | PSI Record | Total Providing Materials |
| Enrollment/Completion | 32 | 3 | 3 | 4 | 42 | 26 | 5 | 8 | 29 |
| Completer/Leaver Follow-up | 30 | - | 2 | 2 | 34 | 28 | - | 4 | 32 |
| Employer Follow-up | 32 | - | 1 | - | 33 | 30 | - | 1 | 31 |
| Staffing | 32 | 1 | 1 | 1 | 35 | 25 | 1 | 6 | 32 |
| Financial | - | - | 7 | 23 | 30 | - | - | 28 | 28 |

*Fifty of the fifty-seven Sates and Territories elected to participate in the study.

TABLE 4

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE ENROLLMENT/COMPLETION REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| Completion Status | 3 | 3 | 5 | 3 |
| Non-follow-up Enrollments | 11 | 8 | 5 | 5 |
| Legislative Purpose | 18 | 13 | 13 | 11 |
| Type Instructional Setting | 12 | 9 | 4 | 5 |
| Co-op Enrollments | 2 | 3 | 2 | 4 |
| Special Needs by Instructional Setting | 5 | 4 | 4 | 3 |
| Special Needs (some or all missing) | 14 | 9 | 4 | 4 |
| Procedural Questions | 4 | 5 | 5 | 4 |
| Consumer and Homemaking Programs | 2 | 2 | 1 | 1 |
| USOE Codes | - | 2 | - | - |
| Race/ethnic by Sex | 3 | 1 | 3 | 1 |
| Grade Level | 1 | N/A | 1 | N/A |
| Non-resident Alien | N/A | 16 | N/A | 9 |
| Recognition Status | N/A | 9 | N/A | 5 |







N/A - Not Applicable

*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 4 (Cont'd)

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE ENROLLMENT/COMPLETION REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| Apprentice Enrollments | N/A | 5 | N/A | 5 |
| Sublevels Missing (OPS, SA, or RA) | N/A | 4 | N/A | 4 |
| Number of States Providing Forms | 45 | 41 | 42 | 39 |
| Number of States Exhibiting No Concerns | 13 | 11 | 20 | 16 |

N/A - Not Applicable
*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 5

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE COMPLETER/LEAVER FOLLOW-UP REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| SOC Categories | 11 | 7 | 5 | 5 |
| Military Employment Status | 6 | 5 | - | 1 |
| Average Hourly Wage | 5 | 3 | - | 1 |
| Leaver Status | 7 | 6 | 1 | 2 |
| Linkage | 3 | 4 | 2 | 1 |
| USOE Codes | 3 | 1 | - | - |
| Non-resident Alien | - | 2 | - | 7 |
| Undefined Procedures | - | 2 | - | 2 |
| Completion Status | - | 1 | 1 | 1 |
| Special Needs | 1 | - | 1 | - |
| Race/ethnic Designation | - | - | 1 | - |
| Sex Designation | - | - | 1 | - |
| Recognition Status | - | - | - | 2 |
| Number of States Providing Forms | 43 | 39 | 34 | 32 |
| Number of States Exhibiting No Concerns | 23 | 19 | 26 | 21 |

*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 6

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE EMPLOYER FOLLOW-UP REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| Undefined Procedures | 2 | 5 | 1 | 3 |
| Linkage | 3 | 1 | 3 | 1 |
| Leaver Status | 3 | 3 | 1 | 1 |
| USOE Codes | 2 | 1 | 1 | - |
| Non-resident Alien | - | 1 | - | 3 |
| Special Needs | - | - | 2 | 1 |
| Race/ethnic Designation | - | - | 1 | - |
| Completion Status | - | - | 1 | - |
| Sex Designation | - | - | 1 | - |
| Number of States Providing Forms | 35 | 32 | 33 | 31 |
| Number of States Exhibiting No Concerns | 27 | 24 | 28 | 16 |

*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 7

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE STAFFING
REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| Other Staff (Non-instructional) | 8 | 6 | 6 | 4 |
| Part-time Status | N/A | 11 | N/A | 7 |
| Race/Ethnic Designation | 2 | 3 | 2 | 2 |
| Sex Designation | 1 | 2 | 1 | 1 |
| Undefined Procedures | 1 | 5 | 1 | 5 |
| Number States Providing Forms | 40 | 36 | 35 | 32 |
| Number of States Exhibiting No Concerns | 25 | 17 | 24 | 18 |







N/A - Not Applicable
*Fifty of the fifty-seven States and Territories elected to participate in the study.

TABLE 8

NUMBER OF PARTICIPATING STATES* EXHIBITING CONCERNS RELATED TO THE FINANCIAL STATUS REPORT REPORTING PURPOSE BY REPORTING YEAR AND REPORTING LEVEL

| | 1979-80 | | 1980-81 | |
|---|---|---|---|---|
| | Secondary | Postsecondary | Secondary | Postsecondary |
| Major Area of Concern | | | | |
| Instructions/procedures Missing | 6 | 7 | 4 | 4 |
| Missing reporting categories (e.g., Section 110, 120, 130, 140, 150, and 102(d) expenditures) | 6 | 5 | 2 | 1 |
| Status of Funds breakdowns missing (e.g., Federal vs. Non-Federal outlays, net outlays, etc.) | 2 | 2 | 2 | 2 |
| Regionally Accredited Reporting Stream Missing | N/A | 2 | N/A | 2 |
| Number of States Providing Forms | 35 | 34 | 30 | 28 |
| Number of States Exhibiting No Concerns | 23 | 22 | 23 | 23 |







N/A - Not Applicable

*Fifty of the fifty-seven States and Territories elected to participate in the study.